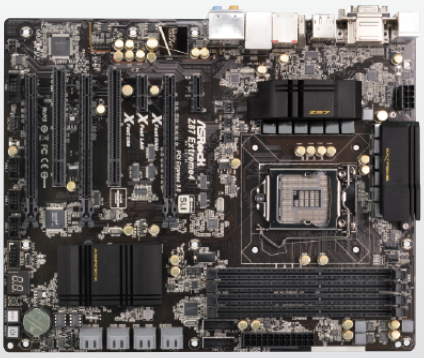
Z87 EXTREME4

Intel® Z87 Chipset

ASRock



Product Brief

- A-Style : Home Cloud, Purity Sound™, HDMI-In
- Supports 4th Gen Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® in LGA1150 Package
- Premium Gold Capacitor Design, Digi Power, 12 Power Phase Design
- Supports Dual Channel DDR3 2933+(OC)
- 3 x PCIe 3.0 x16, 2 x PCIe 2.0 x1
- Supports AMD Quad CrossFireX, 3-Way CrossFireX, CrossFireX
- Supports NVIDIA Quad SLI and SLI
- Multi-VGA Output Options : DVI-D, D-Sub, HDMI, DisplayPort
- Intel Gigabit LAN
- 7.1 CH HD Audio with Content Protection (Realtek ALC1150 Audio Codec), Supports DTS Connect
- 6 x SATA3, 2 x SATA2, 1 x eSATA, 9 x USB 3.0, 8 x USB 2.0
- Supports A-Tuning, XFast 555, Easy Driver Installer, FAN-Tastic Tuning, USB Key

A-Style | Purity Sound | HDMI-In | Home Cloud | Premium Gold Caps | Digi Power | 12 Power Phase Design | 4K/2K | A-Tuning | Triple Monitor | XFast 555

Detail Specification

Platform	- ATX Form Factor - Premium Gold Capacitor design (100% Japan-made high-quality Conductive Polymer Capacitors)
A-Style	- Home Cloud - Purity Sound™ - HDMI-In
CPU	- Supports 4th Generation Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® in LGA1150 Package - Digi Power Design - 12 Power Phase Design - Supports Intel® Turbo Boost 2.0 Technology - Supports Intel® K-Series unlocked CPU - Supports ASRock BCLK Full-range Overclocking
Chipset	- Intel® Z87
Memory	- Dual Channel DDR3 memory technology - 4 x DDR3 DIMM slots - Supports DDR3 2933+(OC)/2800(OC)/2400(OC)/2133(OC)/1866(OC)/1600/1333/1066 non-ECC, un-buffered memory - Max. capacity of system memory: 32GB - Supports Intel® Extreme Memory Profile (XMP) 1.3 / 1.2 - Distortion-Free Slot
Expansion Slot	- 3 x PCI Express 3.0 x16 slots (PCIE2/PCIE4/PCIE5: single at x16 (PCIE2); dual at x8 (PCIE2) / x8 (PCIE4); triple at x8 (PCIE2) / x4 (PCIE4) / x4 (PCIE5) - 2 x PCI Express 2.0 x1 slots - 2 x PCI slots - Supports AMD Quad CrossFireX™, 3-Way CrossFireX™ and CrossFireX™ - Supports NVIDIA® Quad SLI™ and SLI™
Graphics	* Intel® HD Graphics Built-in Visuals and the VGA outputs can be supported only with processors which are GPU integrated. - Supports Intel® HD Graphics Built-in Visuals : Intel® Quick Sync Video with AVC, MVC (S3D) and MPEG-2 Full HW Encode1, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® Insider™, Intel® HD Graphics 4400/4600 - Pixel Shader 5.0, DirectX 11.1 - Max. shared memory 1792MB - Four VGA Output options: D-Sub, DVI-D, HDMI and DisplayPort - Supports Triple Monitors - Supports HDMI Technology with max. resolution up to 4K × 2K (4096x2304) @ 24Hz - Supports DVI-D with max. resolution up to 1920x1200 @ 60Hz - Supports D-Sub with max. resolution up to 1920x1200 @ 60Hz - Supports DisplayPort with max. resolution up to 4K × 2K (4096x2304) @ 24Hz - Supports Auto Lip Sync, Deep Color (12bpc), xvYCC and HBR (High Bit Rate Audio) with HDMI (Compliant HDMI monitor is required) - Supports HDCP function with DVI-D, HDMI and DisplayPort ports - Supports Full HD 1080p Blu-ray (BD) playback with DVI-D, HDMI and DisplayPort ports

Audio	- 7.1 CH HD Audio with Content Protection (Realtek ALC1150 Audio Codec)
	- Premium Blu-ray audio support
	- Supports Purity Sound™
	  - 115dB SNR DAC with differential amplifier
	  - TI® NE5532 Premium Headset Amplifier (supports up to 600 Ohms headsets)
	  - Direct Drive Technology
	  - EMI shielding cover
	  - PCB isolate shielding
	- Supports DTS Connect

LAN	- Gigabit LAN 10/100/1000 Mb/s - Giga PHY Intel® I217V - Supports Intel® Remote Wake Technology - Supports Wake-On-LAN - Supports Energy Efficient Ethernet 802.3az - Supports PXE
Rear Panel I/O	- 1 x PS/2 Mouse/Keyboard Port - 1 x D-Sub Port - 1 x DVI-D Port - 1 x HDMI-Out Port - 1 x HDMI-In Port - 1 x DisplayPort - 1 x Optical SPDIF Out Port - 1 x eSATA Connector - 2 x USB 2.0 Ports - 4 x USB 3.0 Ports - 1 x RJ-45 LAN Port with LED (ACT/LINK LED and SPEED LED) - HD Audio Jack: Rear Speaker / Central / Bass / Line in / Front Speaker / Microphone
Storage	- 6 x SATA3 6.0 Gb/s connectors by Intel® Z87, support RAID (RAID 0, RAID 1, RAID 5, RAID 10, Intel Rapid Storage Technology 12 and Intel Smart Response Technology), NCQ, AHCI and Hot Plug - 2 x SATA3 6.0 Gb/s connectors by ASMedia ASM1061, support NCQ, AHCI and Hot Plug (SATA3_A0 connector is shared with eSATA port) - 1 x eSATA connector by ASMedia ASM1061, supports NCQ, AHCI, Hot Plug and Port Multiplier
Connector	- 1 x IR header - 1 x COM port header - 1 x Power LED header - 2 x CPU Fan connectors (1 x 4-pin, 1 x 3-pin) - 3 x Chassis Fan connectors (1 x 4-pin, 2 x 3-pin) - 1 x Power Fan connector (3-pin) - 1 x 24 pin ATX power connector - 1 x 8 pin 12V power connector - 1 x Front panel audio connector - 3 x USB 2.0 headers (support 6 USB 2.0 ports) - 1 x Vertical Type A USB 3.0 - 2 x USB 3.0 headers (support 4 USB 3.0 ports) (ASMedia Hub) - 1 x Dr. Debug with LED - 1 x Power Switch with LED - 1 x Reset Switch with LED - 1 x Clear CMOS Switch
BIOS Feature	- 2 x 64Mb AMI UEFI Legal BIOS with Multilingual GUI support (1 x Main BIOS and 1 x Backup BIOS) - Supports Secure Backup UEFI Technology - ACPI 1.1 Compliance Wake Up Events - SMBIOS 2.3.1 Support - CPU, DRAM, PCH 1.05V, PCH 1.5V Voltage Multi-adjustment
Support CD	- Drivers, Utilities, AntiVirus Software (Trial Version), CyberLink MediaEspresso 6.5 Trial, Google Chrome Browser and Toolbar, Start8, MeshCentral, Splashtop Streamer

Unique Feature	- ASRock A-Tuning
	- ASRock Instant Flash
	- ASRock APP Charger
	- ASRock XFast USB
	- ASRock XFast LAN
	- ASRock XFast RAM
	- ASRock Crashless BIOS
	- ASRock OMG (Online Management Guard)
	- ASRock Internet Flash
	- ASRock UEFI System Browser
	- ASRock UEFI Tech Service
	- ASRock Dehumidifier Function
	- ASRock Easy RAID Installer
	- ASRock Easy Driver Installer
	- ASRock Interactive UEFI
	- ASRock Fast Boot
	- ASRock Restart to UEFI
	- ASRock USB Key
	- ASRock FAN-Tastic Tuning
	- Hybrid Booster:
	  - CPU Frequency Stepless Control
	  - ASRock U-COP
	  - Boot Failure Guard (B.F.G.)
	- Good Night LED

Hardware Monitor	- CPU/Chassis Temperature Sensing - CPU/Chassis/Power Fan Tachometer - CPU/Chassis Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature) - CPU/Chassis Fan Multi-Speed Control - Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore
OS	- Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit compliant
Certifications	- FCC, CE, WHQL - ErP/EuP Ready (ErP/EuP ready power supply is required)
Accessories	- 1 x ASRock SLI_Bridge_2S Card - Quick Installation Guide, Support CD, I/O Shield - 4 x SATA Data Cables

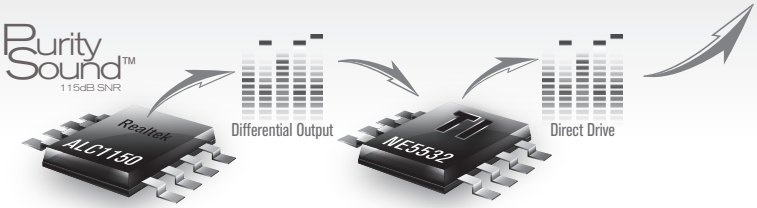
The specification is subject to change without notice. The brand and product names are trademarks of their respective companies. Any configuration other than the original product specification is not guaranteed.

Purity Sound™
115dB SNR

Purity Sound™ is a combination of several hardware, software audio solutions and technologies that will satisfy even the pickiest audiophiles.

Purity Sound™ brings you:

- 115dB SNR
- Excellent Bass
- Less Sound Distortion
- More Details
- Supports up to 600ohm headphones



115dB SNR Differential Codec

115dB SNR Differential Amplifier

HDMI-In

Connect your PC and another device to one monitor and toggle between the primary and secondary screen without replugging the connectors every time.

Home Cloud

Intel® Ethernet

This motherboard supports remote wake with the onboard Intel LAN, so you can connect with your PC from anywhere in the world. You will be able to power your PC on or turn it off, monitor and take control of it remotely with another smartphone, tablet or computer.

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Premium Gold Caps

Premium Gold Caps are 100% made in Japan; these solid capacitors are sleek, high gloss caps with a premium gold coating representing long life and stable performance.

Digi Power

By adopting digital Pulse-width modulation (PWM), the ASRock motherboard can provide CPU Vcore voltage more efficiently and smoothly.

12 Power Phase Design

Designed with a 12 Power Phase Design, this motherboard features sturdy components and completely smooth power delivery to the CPU. Plus, it offers unmatched overclocking capabilities and enhanced performance with the lowest temperature for advanced gamers as well.

4K/2K

4K is a new standard for display resolutions with a minimum of 3840 x 2160 pixels, which is twice the horizontal and vertical resolution of the 1080p format and four times as many pixels overall.

A-Tuning

A-Tuning is ASRock's multi purpose software suite with a new interface, more new features and improved utilities, including XFast RAM, OC Tweaker and a whole lot more.

Triple Monitor

This motherboard supports Triple-Monitor. You may choose up to three display interfaces to connect monitors and use them simultaneously.

Distortion-Free Slot

ASRock's new pin design for the memory slots that effectively reduces distortion and promotes performance.

dts Connect

DTS Connect is a blanket name for a two-part system, including DTS Interactive and DTS Neo:PC, it is used on the computer platform only, in order to convert PC audio into the DTS format.

XFast 555

ASRock's unique XFast 555 technology (XFast RAM, XFast LAN and XFast USB) allows users to experience 5 times performance boost in terms of system performance, LAN speed and USB transfer speed.

FAN-Tastic Tuning

Configure different fan speeds for respective temperatures using the graph. The fans will automatically shift to the next speed level when the assigned temperature is met.

Easy Driver Installer

For users that don't have an optical disk drive to install the drivers from our support CD, Easy Driver Installer is a handy tool in the UEFI that installs the LAN driver to your system via an USB storage device, then downloads and installs the other required drivers automatically.

USB Key

Just plug in the USB Key and let your computer log in to windows automatically without having to type your username and password!

UEFI Tech Service

Contact ASRock Tech Service by sending a support request form from the UEFI setup utility if you are having trouble with your PC.

Fast Boot

With ASRock's exclusive Fast Boot technology, it takes less than 1.5 seconds* to logon to Windows 8 from a cold boot. No more waiting! The speedy boot will completely change your user experience and behavior.
*The boot time may vary with a different configuration.

Restart to UEFI

ASRock "Restart to UEFI" technology is designed for those requiring frequent UEFI access. It allows users to easily enter the UEFI SETUP automatically when turning on the PC next time.

OMG

ASRock OMG technology allows you to establish an internet curfew or restrict internet access at specified times. Administrators are able to schedule the starting and ending hours of internet access granted to other users.